

# Medium-Voltage Cables - 5kV-35kV



*The Power of One* source provides more options and the widest range of standard, specialized, and custom-engineered cables for every application/budget. From basics to the best, General Cable offers custom solutions to meet your specific requirements and thereby ensure the perfect fit for any job.

Today's medium-voltage cables are subject to a myriad of environmental, regulatory and performance standards. BICC® Brand 5-35kV cables are designed to surpass these standards and deliver power to critical equipment without failure.

Offering the widest range of jacketing and insulating materials in the industry, our standard options include Hypalon® (CSPE), CPE, EPR, XLPE, LSZH and

PVC. Everyday solutions range from cost effective copper tape-shielded Uniblend® to UniShield® – the smallest, premium medium-voltage power cable the industry has to offer.

Our engineers have the experience and expertise to utilize materials and configurations to combine the optimum balance of properties for any application. Our medium-voltage cables service the industrial, commercial and specialty applications.

If you have medium-voltage requirements, General Cable is your best source for high quality, dependable solutions.

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## MEDIUM-VOLTAGE CABLES

PRODUCT LINE	AWG RANGE	INSULATION	JACKET	VOLTAGE	UL LISTING
UNISHIELD®	2 - 1000	EPR	CPE	5-35kV	MV-105
UNIBLEND® Single Conductor	6 - 1000	EPR	PVC	5-35kV	MV-105
UNIBLEND® Three Conductor	6 - 1000	EPR	PVC	5-35kV	MV-105
DURASHEATH®	8 - 1000	EPR	Hypalon® (CSPE)	5kV	MV-90
COPPER WIRE SHIELD	8 - 1000	XLPE	PVC	5kV & 15kV	MV-90



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# UniShield® Medium-Voltage Power, Shielded, EPR/CPE

5kV - 35kV, UL Type MV-105



## Product Construction

### Conductor:

- 2 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers

### Composite Insulation Shield and Jacket:

- Six corrugated copper drain wires embedded in an extruded black conducting flame-retardant Chlorinated Polyethylene (CPE) composite insulation shield and jacket

### Print:

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCML) COMPACT CU UNISHIELD EP (INSULATION THICKNESS) MILS DRTP SEMI-CON CPE JKT (VOLTAGE) KV% INSULATION LEVEL TYPE MV-105 SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

## Applications:

- Installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines, and both fossil fuel and nuclear utility generating stations
- Suitable for use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations

## Features:

- Rated at 105°C
- Reduced conductor size and shield system provides the smallest premium medium-voltage shielded power cable with full insulation
- Smaller outside dimensions reduce the size of duct needed or increase the ampacity per duct
- All features attribute to faster and easier installation
- Superior cold bend and cold impact performance
- Stable and constant shield short circuit performance
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling

## Features (con't):

- High dielectric strength
- Low dielectric loss
- Low moisture absorption
- Electrical stability under stress
- Chemical-resistant
- Sunlight-resistant
- Meets cold bend test at -55°C

## Compliances:

- 1999 NEC:
  - Ampacities ..... Article 310-15
  - Wiring Methods ..... Article 300 & 710
  - Cable Trays ..... Article 318
  - Grounding Sizes ..... Article 250-95
  - Medium-Voltage Cable Type MV ..... Article 326
  - UL 1072
  - ICEA S-93-639/NEMA WC74 and ICEA S-97-682 (formerly ICEA S-68-516/NEMA WC8)
  - AEIC CS8 (formerly AEIC CS6) Electrical Requirements
  - UL listed as Type MV-105 for use in accordance with NEC
  - Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable
- Additional Flame Tests:
  - IEEE 1202 (70,000 BTU/hr)/CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)

## Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

**5kV - 133% INSULATION LEVEL (UNGROUNDED) - 115 MILS  
8kV - 100% INSULATION LEVEL (GROUNDED) - 115 MILS**

CATALOG NUMBER	COND. (AWG/ kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		NOMINAL DIA. OVER INSULATION		DRAIN WIRE AWG SIZE	NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm		INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km
<b>19101.650200</b>	2	7/.0974	0.27	6.88	0.54	13.72	20	0.71	18.03	225	335	411	612
<b>19101.655100</b>	1/0	19.0745	0.34	8.69	0.62	15.75	20	0.79	20.07	346	515	563	838
<b>19101.665200</b>	2/0	19/.0837	0.38	9.75	0.66	16.76	19	0.84	21.34	436	649	675	1005
<b>19101.665300</b>	3/0	19/.0940	0.43	10.97	0.71	18.03	19	0.89	22.61	543	808	804	1197
<b>19101.665400</b>	4/0	19/.1055	0.48	12.24	0.76	19.30	19	0.94	23.88	678	1009	961	1430
<b>19101.676000</b>	250	37/.0822	0.53	13.33	0.81	20.83	18	1.01	25.65	804	1196	1122	1670
<b>19101.676200</b>	350	37/.0973	0.62	15.72	0.91	23.11	18	1.11	28.19	1112	1655	1476	2197
<b>19101.686500</b>	500	37/.1162	0.74	18.80	1.03	26.16	17	1.24	31.50	1583	2356	2015	2999
<b>19101.687000</b>	750	61/.1109	0.91	23.14	1.22	30.99	17	1.48	37.59	2357	3508	2893	4305
<b>19101.667500</b>	1000	61/.1280	1.06	27.03	1.38	35.05	16	1.61	40.89	3138	4670	3786	5634

Dimensions and weights are nominal, subject to industry tolerance.

Note:
 

- a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"
- b) The NESI Lightning bolt symbol is on all UniShield constructions

**BICC**  
BRAND

LISTED

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# UniShield® Medium-Voltage Power, Shielded, EPR/CPE

5kV - 35kV, UL Type MV-105

## Product Construction

### Conductor:

- 2 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers

### Composite Insulation Shield and Jacket:

- Six corrugated copper drain wires embedded in an extruded black conducting flame-retardant Chlorinated Polyethylene (CPE) composite insulation shield and jacket

### Print:

GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU UNISHIELD EP (INSULATION THICKNESS) MILS DRTP SEMI-CON CPE JKT (VOLTAGE) KV% INSULATION LEVEL TYPE MV-105 SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Applications:

- Installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines, and both fossil fuel and nuclear utility generating stations
- Suitable for use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations



### Features:

- Rated at 105°C
- Reduced conductor size and shield system provides the smallest premium medium-voltage shielded power cable with full insulation
- Smaller outside dimensions reduce the size of duct needed or increase the ampacity per duct
- All features attribute to faster and easier installation
- Superior cold bend and cold impact performance
- Stable and constant shield short circuit performance
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low dielectric loss
- Low moisture absorption
- Electrical stability under stress
- Chemical-resistant
- Sunlight-resistant
- Meets cold bend test at -55°C

### Compliances:

- 1999 NEC:
- Ampacities . . . . . Article 310-15
  - Wiring Methods . . . . . Article 300 & 710
  - Cable Trays . . . . . Article 318
  - Grounding Sizes . . . . . Article 250-95
  - Medium-Voltage Cable Type MV . . . . . Article 326
  - UL 1072
  - ICEA S-93-639/NEMA WC74 and ICEA S-97-682 (formerly ICEA S-68-516/NEMA WC8)
  - AEIC CS8 (formerly AEIC CS6) Electrical Requirements
  - UL listed as Type MV-105 for use in accordance with NEC
  - Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable
- Additional Flame Tests:**
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)

### Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 15kV\* - 133% INSULATION LEVEL (UNGROUNDED) - 220 MILS

CATALOG NUMBER	COND. (AWG/kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		NOMINAL DIA. OVER INSULATION		DRAIN WIRE AWG SIZE	NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm		INCHES	mm	lbs/1000ft	kg/km	lbs/1000ft	kg/km
19161.660200	2	7/.0974	0.27	6.88	0.76	19.30	19	0.94	23.88	230	342	574	854
19161.675100	1/0	19/.0745	0.34	8.69	0.83	21.08	18	1.02	25.91	358	533	753	1121
19161.675200	2/0	19/.0837	0.38	9.75	0.87	22.10	18	1.07	27.18	443	659	867	1290
19161.665300	3/0	19/.0940	0.43	10.97	0.92	23.37	18	1.12	28.45	550	818	1004	1494
19161.675400	4/0	19/.1055	0.48	12.24	0.97	24.64	18	1.17	29.72	685	1019	1171	1743
19161.686000	250	37/.0822	0.53	13.33	1.03	26.16	17	1.24	31.50	813	1210	1349	2008
19161.686200	350	37/.0973	0.62	15.72	1.12	28.45	17	1.33	33.78	1121	1668	1720	2560
19161.686500	500	37/.1162	0.74	18.80	1.25	31.75	17	1.46	37.08	1583	2356	2267	3374
19161.697000	750	61/.1109	0.91	23.14	1.43	36.32	16	1.67	42.42	2368	3524	3216	4786
19161.307500	1000	61/.1280	1.06	27.03	1.59	40.39	15	1.86	47.24	3152	4691	4164	6197

\* 100% insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note:      a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"  
              b) The NEC Lightning bolt symbol is on all UniShield constructions



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# UniShield® Medium-Voltage Power, Shielded, EPR/CPE

5kV - 35kV, UL Type MV-105



## Product Construction

### Conductor:

- 1/0 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers

### Composite Insulation Shield and Jacket:

- Six corrugated copper drain wires embedded in an extruded black conducting flame-retardant Chlorinated Polyethylene (CPE) composite insulation shield and jacket

### Print:

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU UNISHIELD EP (INSULATION THICKNESS) MILS DRTP SEMI-CON CPE JKT (VOLTAGE) KV% INSULATION LEVEL TYPE MV-105 SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

## Applications:

- Installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines, and both fossil fuel and nuclear utility generating stations
- Suitable for use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations

## Features:

- Rated at 105°C
- Reduced conductor size and shield system provides the smallest premium medium-voltage shielded power cable with full insulation
- Smaller outside dimensions reduce the size of duct needed or increase the ampacity per duct
- All features attribute to faster and easier installation
- Superior cold bend and cold impact performance
- Stable and constant shield short circuit performance
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low dielectric loss

**25kV\* - 133% INSULATION LEVEL (UNGROUNDED) - 345 MILS  
35kV\*\* - 100% INSULATION LEVEL (GROUNDED) - 345 MILS**

CATALOG NUMBER	COND. (AWG/ kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		NOMINAL DIA. OVER INSULATION		DRAIN WIRE AWG SIZE	NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm		INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km
19261.685100	1/0	19/.0745	0.34	8.69	1.08	27.43	17	1.29	32.77	367	546	1027	1528
19261.685200	2/0	19/.0837	0.38	9.75	1.12	25.91	17	1.33	33.78	452	673	1147	1707
19261.685300	3/0	19/.0940	0.43	10.97	1.17	29.72	17	1.38	35.05	559	832	1296	1929
19261.685400	4/0	19/.1055	0.48	12.24	1.22	30.99	17	1.44	36.58	694	1033	1477	2198
19261.686000	250	37/.0822	0.53	13.33	1.28	32.51	16	1.51	38.35	824	1226	1685	2508
19261.686200	350	37/.0973	0.62	15.72	1.37	34.80	16	1.61	40.89	1132	1685	2079	3094
19261.686500	500	37/.1162	0.74	18.80	1.50	38.10	16	1.74	44.20	1594	2372	2654	3950
19261.687000	750	61/.1109	0.91	23.14	1.68	42.67	15	1.96	49.78	2382	3545	3669	5460
19261.687500	1000	61/.1280	1.06	27.03	1.84	46.74	15	2.11	53.59	3152	4691	4591	6832

\* 100% insulation level is available upon request

\*\* 133% insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note:  
a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"  
b) The NESL Lightning bolt symbol is on all UniShield constructions

## Features (con't):

- Low moisture absorption
- Electrical stability under stress
- Chemical-resistant
- Sunlight-resistant
- Meets cold bend test at -55°C

## Compliances:

1999 NEC:

- Ampacities . . . . Article 310-15
- Wiring Methods . . . . Article 300 & 710
- Cable Trays . . . . Article 318
- Grounding Sizes . . . . Article 250-95
- Medium-Voltage Cable Type MV . . . . Article 326
- UL 1072
- IEC 6006-639/NEMA WC74 and IEC 6006-682 (formerly IEC 6006-516/NEMA WC8)
- AEIC CS8 (formerly AEIC CS6) Electrical Requirements
- UL listed as Type MV-105 for use in accordance with NEC
- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
- Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA acceptable
- Additional Flame Tests:  
• IEEE 1202 (70,000 BTU/hr)/CSA FT4  
• IEC 6006-29-520 (210,000 BTU/hr)

## Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing



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# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Single Conductor

**Product Construction****Conductor:**

- 6 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

**Extruded Strand Shield (ESS):**

- Extruded thermoset semi-conducting stress control layer over conductor

**Insulation:**

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

**Extruded Insulation Shield (EIS):**

- Thermoset semi-conducting polymeric layer free stripping from insulation

**Metallic Shield:**

- 5 mil annealed copper tape with an overlap of 25%

**Jacket:**

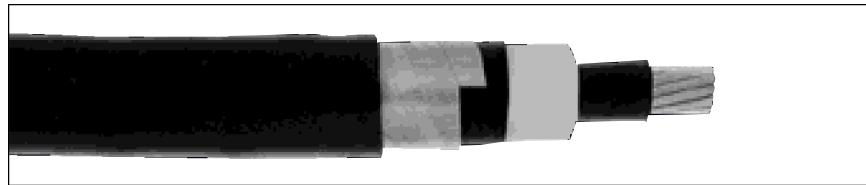
- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

**Print:**

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU UNIBLEND (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV% INSULATION LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

**Options:**

- PVC jacket colors other than black
- Flame-retardant, Chlorinated Polyethylene (CPE) jacket
- Low-Lead Hypalon® Chlorosulfonated Polyethylene jacket (CSPE)
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Other constructions available upon request

**Applications:**

- Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants, and other industrial three-phase applications
- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations

**Features:**

- Rated at 105°C
- Excellent heat and moisture resistance
- Excellent flame resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C

**Compliances:**

- 1999 NEC:
- Ampacities ..... Article 310-15
  - Grounding Conductor ..... Article 250-95
  - Wiring Methods ..... Article 300 & 710
  - Bending Radius ..... Article 300-34

**Compliances (con't):**

- Cable Trays ..... Article 318
  - Type MV ..... Article 326
  - UL 1072
  - ICEA S-93-639/NEMA WC74 (Formerly ICEA S-68-516/NEMA WC8)
  - ICEA S-97-682
  - AEIC CS8 (Formerly AEIC CS6)
  - UL listed as Type MV-105 for use in accordance with NEC
  - Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable
- Additional Flame Tests:**
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)

**Packaging:**

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

**5kV - 133% INSULATION LEVEL - 115 MILS  
8kV - 100% INSULATION LEVEL - 115 MILS**

CATALOG NUMBER	COND. (AWG/ kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION SHIELD NOMINAL DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km
17001.120600	6	7/.0612	0.17	4.32	0.20	5.08	0.44	11.18	0.51	12.95	0.65	16.51	125	186	292	435
17001.120400	4	7/.0772	0.22	5.59	0.25	6.35	0.48	12.19	0.55	13.97	0.69	17.53	177	263	363	540
17001.120200	2	7/.0974	0.27	6.86	0.30	7.62	0.54	13.72	0.61	15.49	0.75	19.05	258	384	469	698
17001.120100	1	19/.0664	0.31	7.87	0.34	8.64	0.58	14.73	0.64	16.26	0.79	20.07	316	470	541	805
17001.125100	1/0	19/.0745	0.34	8.64	0.38	9.65	0.61	15.49	0.68	17.27	0.83	21.08	386	574	629	936
17001.125200	2/0	19/.0837	0.38	9.65	0.42	10.67	0.66	16.76	0.73	18.54	0.87	22.10	474	705	737	1097
17001.125300	3/0	19/.0940	0.43	10.92	0.47	11.97	0.71	18.03	0.78	19.81	0.96	24.38	586	872	907	1350
17001.135400	4/0	19/.1055	0.48	12.19	0.52	13.21	0.76	19.30	0.83	21.08	1.01	25.65	725	1079	1072	1595
17001.136000	250	37/.0822	0.53	13.46	0.57	14.48	0.81	20.57	0.88	22.35	1.07	27.18	875	1302	1228	1828
17001.136200	350	37/.0973	0.62	15.75	0.67	17.02	0.91	23.11	0.98	24.89	1.17	29.72	1164	1732	1595	2374
17001.136500	500	37/.1162	0.74	18.80	0.79	20.07	1.03	26.16	1.13	28.70	1.32	33.53	1638	2438	2158	3212
17001.137000	750	61/.1109	0.91	23.11	0.97	24.64	1.22	30.99	1.31	33.27	1.51	38.35	2428	3613	3062	4557
17001.137500	1000	61/.1280	1.06	26.92	1.13	28.70	1.37	34.80	1.47	37.34	1.67	42.42	3232	4810	3940	5864

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"  
b) The NEC Lightning bolt symbol is on all Uniblend constructions

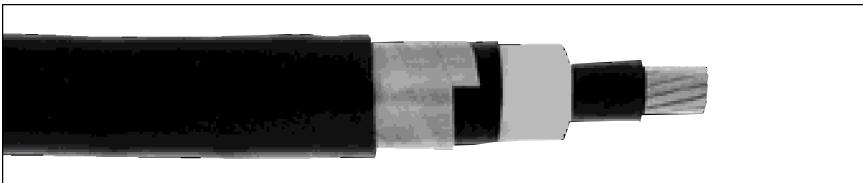


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# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Single Conductor



## Product Construction

### Conductor:

- 2 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Metallic Shield:

- 5 mil annealed copper tape with an overlap of 25%

### Jacket:

- Flame-retardant and sunlight-resistant Polyvinyl Chloride (PVC)

### Print:

- GENERAL CABLE® BICC® BRAND (M) SIZE (AWG OR KCMIL) COMPACT CU UNIBLEND (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV% INSULATION LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

## Options:

- PVC jacket colors other than black
- Flame-retardant, Chlorinated Polyethylene (CPE) jacket
- Low-Lead Hypalon® Chlorosulfonated Polyethylene (CSPE) jacket
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Other constructions available upon request

## Applications:

- Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants, and other industrial three-phase applications
- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations

## Features:

- Rated at 105°C
- Excellent heat and moisture resistance
- Excellent flame resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C

## Compliances:

- 1999 NEC:
- Ampacities ..... Article 310-15
  - Grounding Conductor ..... Article 250-95
  - Wiring Methods ..... Article 300 & 710
  - Bending Radius ..... Article 300-34
  - Cable Trays ..... Article 318
  - Type MV ..... Article 326
  - UL 1072
  - ICEA S-93-639/NEMA WC74 (Formerly ICEA S-68-516/NEMA WC8)
  - ICEA S-97-682
  - AEIC CS8 (Formerly AEIC CS6)
  - UL listed as Type MV-105 for use in accordance with NEC
  - Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable
- Additional Flame Tests:**
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)

## Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 15kV\* - 133% INSULATION LEVEL - 220 MILS

CATALOG NUMBER	COND. (AWG/ kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL CABLE O.D.	COPPER WEIGHT		NET WEIGHT		
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm		lbs./ 1000ft	kg/ km	lbs./ 1000ft	kg/ km	
17031.130200	2	.7/.0974	0.27	6.86	0.30	7.62	0.75	19.05	0.82	20.83	1.01	25.65	277	412	685	1019
17031.130100	1	19/.0664	0.31	7.87	0.34	8.64	0.79	20.07	0.86	21.84	1.04	26.42	334	497	765	1138
17031.135100	1/0	19/.0745	0.34	8.64	0.38	9.65	0.83	21.08	0.90	22.86	1.08	27.43	404	601	861	1281
17031.135200	2/0	19/.0837	0.38	9.65	0.42	10.67	0.87	22.10	0.94	23.88	1.13	28.70	493	734	979	1457
17031.135300	3/0	19/.0940	0.43	10.92	0.47	11.97	0.92	23.37	0.99	25.15	1.18	29.97	604	899	1124	1673
17031.135400	4/0	19/.1055	0.48	12.19	0.52	13.21	0.97	24.64	1.04	26.42	1.23	31.24	744	1107	1299	1933
17031.136000	250	37/.0822	0.53	13.46	0.57	14.48	1.02	25.91	1.10	27.94	1.29	32.77	868	1292	1464	2179
17031.136200	350	37/.0973	0.62	15.75	0.67	17.02	1.12	28.45	1.22	30.99	1.41	35.81	1184	1762	1875	2790
17031.136500	500	37/.1162	0.74	18.80	0.79	20.07	1.25	31.75	1.34	34.04	1.53	38.86	1657	2466	2440	3631
17031.137000	750	61/.1109	0.91	23.11	0.97	24.64	1.43	36.32	1.53	38.86	1.72	43.69	2447	3642	3378	5027
17031.137500	1000	61/.1280	1.06	26.92	1.13	28.70	1.59	40.39	1.71	43.43	1.97	50.04	3232	4810	4433	6597

\* 100% insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"  
b) The NESC Lightning bolt symbol is on all Uniblend constructions



Phone:(800) 338-0901  
www.generalcable.com

# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Single Conductor

**Product Construction****Conductor:**

- 1/0 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

**Extruded Strand Shield (ESS):**

- Extruded thermoset semi-conducting stress control layer over conductor

**Insulation:**

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

**Extruded Insulation Shield (EIS):**

- Thermoset semi-conducting polymeric layer free stripping from insulation

**Metallic Shield:**

- 5 mil annealed copper tape with an overlap of 25%

**Jacket:**

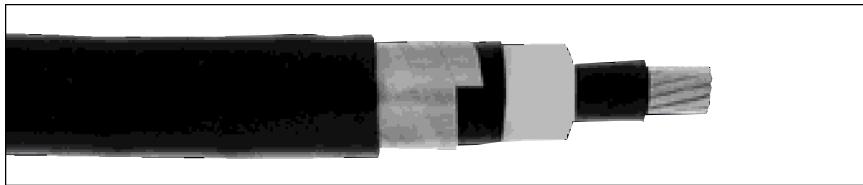
- Flame-retardant and sunlight-resistant Polyvinyl Chloride (PVC)

**Print:**

GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU UNIBLEND (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV6 INSULATION LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

**Options:**

- PVC jacket colors other than black
- Flame-retardant, Chlorinated Polyethylene (CPE) jacket
- Low-Lead Hypalon® Chlorosulfonated Polyethylene (CSPE) jacket
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Other constructions available upon request

**Applications:**

- Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants, and other industrial three-phase applications
- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations

**Features:**

- Rated at 105°C
- Excellent heat and moisture resistance
- Excellent flame resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical resistant
- Meets cold bend test at -35°C

**Compliances:**

- 1999 NEC:
- Ampacities .....
  - Grounding Conductor .....
  - Wiring Methods .....
  - Radius.....
  - Cable Trays.....
  - Type MV .....
  - UL 1072

**Compliances (con't):**

- ICEA S-93-639/NEMA WC74 (Formerly ICEA S-68-516/NEMA WC8)
- ICEA S-97-682
- AEIC CS8 (Formerly AEIC CS6)
- UL listed as Type MV-105 for use in accordance with NEC
- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
- Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA acceptable

**Additional Flame Tests:**

- IEEE 1202 (70,000 BTU/hr)/CSA FT4
- ICEA T-29-520 (210,000 BTU/hr)

**Packaging:**

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

**35kV\*\* - 100% INSULATION LEVEL - 345 MILS**

CATALOG NUMBER	COND. (AWG/ kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL CABLE O.D.	COPPER WEIGHT		NET WEIGHT		
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm		lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km	
17061.135100	1/0	19/.0745	0.34	8.64	0.38	9.65	1.08	27.43	1.17	29.72	1.36	34.54	428	637	1175	1749
17061.135200	2/0	19/.0837	0.38	9.65	0.42	10.67	1.12	28.45	1.22	30.99	1.41	35.81	517	769	1304	1941
17061.135300	3/0	19/.0940	0.43	10.92	0.47	11.94	1.17	29.72	1.27	32.26	1.46	37.08	628	935	1461	2174
17061.135400	4/0	19/.1055	0.48	12.19	0.52	13.21	1.22	30.99	1.32	33.53	1.51	38.35	768	1143	1648	2453
17061.136000	250	37/.0822	0.53	13.46	0.57	14.48	1.28	32.51	1.37	34.80	1.57	39.88	891	1326	1826	2717
17061.136200	350	37/.0973	0.62	15.75	0.67	17.02	1.37	34.80	1.47	37.34	1.67	42.42	1207	1796	2234	3325
17061.136500	500	37/.1162	0.74	18.80	0.79	20.07	1.50	38.10	1.60	40.64	1.85	46.99	1680	2500	2934	4366
17061.137000	750	61/.1109	0.91	23.11	0.97	24.64	1.68	42.67	1.81	45.97	2.06	52.32	2471	3677	3962	5896
17061.137500	1000	61/.1280	1.06	26.92	1.13	28.70	1.84	46.74	1.96	49.78	2.22	56.39	3255	4844	4917	7317

\*\* 133% insulation level is available upon request

\* 100% insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"

b) The NESI Lightning bolt symbol is on all Uniblend constructions



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# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Three Conductor



## Product Construction

### Conductor:

- 6 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Grounding Conductor(s):

- 1-3 bare or covered grounding conductors may be supplied in the twisted assembly upon request

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

### Metallic Shield:

- 5mil annealed copper tape with an overlap of 25%

### Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

## Print:

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU 3/C (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV96 INSUL LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

## Options:

- PVC jacket colors other than black
- Low-Lead Hypalon® Chlorosulfonated Polyethylene (CSPE) jacket
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Jacketed singles
- UniShield singles
- Other constructions available upon request

## Applications:

- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited, and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray, and underground duct installations

## Features:

- Rated at 105°C
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C

## Compliances:

### 1999 NEC:

- Ampacities . . . . . Article 310-15
- Wiring Methods. . . . . Article 300 & 710
- Bending Radius. . . . . Article 300-34
- Cable Trays. . . . . Article 318
- Type MV . . . . . Article 326
- UL 1072
- ICEA S-93-639/NEMA WC74 (formerly ICEA S-68-516/NEMA WC8)
- ICEA S-97-682
- AEIC CS8 (formerly AEIC CS6)
- UL listed as Type MV-105 for use in accordance with NEC
- IEEE 383 (70,000 BTU/hr)
- Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA acceptable

### Additional Flame Tests:

- IEEE 1202 (70,000 BTU/hr)/CSA FT4
- ICEA T-29-520 (210,000 BTU/hr)

## Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 5kV - 133% INSULATION LEVEL - 115 MILS 8kV - 100% INSULATION LEVEL - 115 MILS

CATALOG NUMBER	COND. (AWG/ kcmil SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL DIAMETER UNDERJACKET		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km
15493.400600	6	7/0.0612	0.17	4.32	0.19	4.83	0.43	10.92	0.49	12.45	1.12	28.45	1.29	32.77	380	566	939	1397
15493.400400	4	7/0.0772	0.22	5.59	0.24	6.10	0.47	11.94	0.54	13.72	1.22	30.99	1.39	35.31	537	799	1158	1723
15493.400200	2	7/0.0974	0.27	6.86	0.29	7.37	0.53	13.46	0.60	15.24	1.34	34.04	1.51	38.35	783	1165	1511	2249
15493.405100	1/0	19/0.0745	0.34	8.64	0.36	9.14	0.60	15.24	0.67	17.02	1.50	38.10	1.67	42.42	1168	1738	2030	3021
15493.405200	2/0	19/0.0837	0.38	9.05	0.41	10.41	0.64	16.26	0.71	18.03	1.59	40.39	1.82	46.23	1437	2139	2449	3645
15493.405400	4/0	19/1.055	0.58	14.73	0.51	12.95	0.74	18.30	0.82	20.83	1.83	46.48	2.07	52.58	2197	3270	3438	5116
15493.406000	250	37/0.0822	0.53	13.46	0.55	13.97	0.79	20.07	0.86	21.84	1.92	48.77	2.15	54.61	2571	3826	3893	5794
15493.406200	350	37/0.0973	0.62	15.25	0.65	16.51	0.89	22.61	0.96	24.38	2.14	54.36	2.36	59.94	3529	5252	5009	7454
15493.406500	500	37/1.1162	0.74	18.80	0.77	19.56	1.01	26.65	1.09	27.69	2.40	60.96	2.64	67.06	4961	7383	6793	10065
15493.407000	750	61/1.1109	0.91	23.11	0.95	24.13	1.19	30.23	1.29	32.77	2.84	72.14	3.14	79.76	7359	10952	9833	14633
15493.407500	1000	61/1.1280	1.06	26.92	1.10	27.94	1.35	34.29	1.45	36.83	3.17	80.62	3.48	88.39	9732	14483	12601	18753

Dimensions and weights are nominal, subject to industry tolerance.

Note:  
a) Sizes smaller than 2 AWG do not include "FOR CT USE"  
b) The NESL Lightning bolt symbol is on all Uniblend constructions



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# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Three Conductor

## Product Construction

### Conductor:

- 2 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Grounding Conductor(s):

- 1-3 bare or covered grounding conductors may be supplied in the twisted assembly upon request

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

### Metallic Shield:

- 5mil annealed copper tape with an overlap of 25%

### Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

### Print:

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) COMPACT CU 3/C (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV% INSUL LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Options:

- PVC jacket colors other than black
- Low-Lead Hypalon Chlorosulfonated Polyethylene (CSPE) jacket
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Jacketed singles
- UniShield singles
- Other constructions available upon request



### Applications:

- Suited for use in a broad range of commercial industrial, and utility applications, where reliability is the major concern, space is limited, and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray, and underground duct installations

### Features:

- Rated at 105°C
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C

### Compliances:

- 1999 NEC:
  - Ampacities . . . . Article 310-15
  - Wiring Methods . . . . Article 300 & 710
  - Bending Radius . . . . Article 300-34
  - Cable Trays . . . . Article 318
  - Type MV . . . . Article 326

### Compliances (con't):

- UL 1072
- ICEA S-93-639/NEMA WC74 (formerly ICEA S-68-516/NEMA WC8)
- ICEA S-97-682
- AEIC CS8 (formerly AEIC CS6)
- UL listed as Type MV-105 for use in accordance with NEC
- IEEE 383 (70,000 BTU/hr)
- Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA acceptable

### Additional Flame Tests:

- IEEE 1202 (70,000 BTU/hr)/CSA FT4
- ICEA T-29-520 (210,000 BTU/hr)

### Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 15kV\* - 133% INSULATION LEVEL - 220 MILS

CATALOG NUMBER	COND. (AWG/kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL DIAMETER UNDER JACKET		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/1000ft	kg/km	lbs/1000ft	kg/km
15493.440200	2	7/.0974	0.27	6.86	0.29	7.37	0.74	18.80	0.81	20.57	1.81	45.97	2.04	51.82	839	1249	2226	3313
15493.445100	1/0	19/.0745	0.34	8.64	0.36	9.14	0.81	20.57	0.88	22.35	1.96	49.78	2.20	55.88	1224	1822	2811	4183
15493.445200	2/0	19/.0837	0.38	9.65	0.41	10.41	0.86	21.84	0.93	23.62	2.06	52.32	2.30	58.42	1493	2222	3163	4707
15493.445400	4/0	19/.1055	0.48	12.19	0.51	12.95	0.96	24.38	1.03	26.16	2.28	57.91	2.52	64.01	2253	3353	4203	6255
15493.446000	250	37/.0822	0.53	13.46	0.55	13.97	1.00	25.40	1.09	27.69	2.42	61.47	2.66	67.56	2627	3909	4775	7106
15493.446200	350	37/.0973	0.62	15.75	0.65	16.51	1.10	27.94	1.20	30.48	2.64	67.06	2.94	74.68	3589	5341	6182	9200
15493.446500	500	37/.1162	0.74	18.80	0.77	19.56	1.23	31.24	1.32	33.53	2.91	73.91	3.21	81.53	5022	7474	7686	11438
15493.447000	750	61/.1109	0.91	23.11	0.95	24.13	1.41	35.81	1.50	38.10	3.30	83.82	3.61	91.69	7415	11035	10978	16337
15493.447500	1000	61/.1280	1.06	26.92	1.10	27.94	1.56	39.62	1.68	42.67	3.68	93.47	3.99	101.35	9793	14574	13983	20810

\* 100% insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 2 AWG do not include "FOR CT USE"

b) The NEC Lightning bolt symbol is on all Uniblend constructions



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# Uniblend® Medium-Voltage Power, Shielded, EPR/PVC

5kV - 35kV, UL Type MV-105 Three Conductor



## Product Construction

### Conductor:

- 1/0 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Grounding Conductor(s):

- 1-3 bare or covered grounding conductors may be supplied in the twisted assembly upon request

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers

### Metallic Shield:

- 5mil annealed copper tape with an overlap of 25%

### Jacket:

- Flame-retardant, moisture and sunlight-resistant Polyvinyl Chloride (PVC)

### Print:

- GENERAL CABLE® BICC® BRAND (M) SIZE (AWG OR KCML) COMPACT CU 3/C (INSULATION THICKNESS) MILS EPR TYPE MV-105 (VOLTAGE) KV% INSUL LEVEL SUN RES FOR CT USE (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Options:

- PVCJacket colors other than black
- Low-Lead Hypalon Chlorosulfonated Polyethylene (CSPE) jacket
- Low-Smoke, Zero-Halogen (LSZH) jacket
- Jacketed singles
- UniShield singles
- Other constructions available upon request

### Applications:

- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited, and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray, and underground duct installations

### Features:

- Rated at 105°C
- Excellent heat and moisture resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C

### Compliances:

- 1999 NEC:
- Ampacities . . . . . Article 310-15
  - Wiring Methods. . . . . Article 300 & 710
  - Bending Radius . . . . . Article 300-34
  - Cable Trays. . . . . Article 318
  - Type MV. . . . . Article 326
  - UL 1072
  - ICEA S-93-639/NEMA WC74 (formerly ICEA S-68-516/NEMA WC8)
  - ICEA S-97-682
  - AEIC CS8 (formerly AEIC CS6)
  - UL listed as Type MV-105 for use in accordance with NEC
  - IEEE 383 (70,000 BTU/hr)
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable
- Additional Flame Tests:**
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)

### Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 35kV\*\* - 100% INSULATION LEVEL - 345 MILS

CATALOG NUMBER	COND. (AWG/kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL DIAMETER UNDER JACKET		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km

15493.485100	1/0	19/.0745	0.34	8.64	0.36	9.14	1.07	27.18	1.16	29.46	2.56	65.02	2.80	71.12	1297	1930	3861	5746
15493.485200	2/0	19/.0837	0.38	9.65	0.41	10.41	1.11	28.19	1.20	30.48	2.65	67.31	2.95	74.93	1566	2330	4462	6640
15493.485400	4/0	19/.1055	0.48	12.19	0.51	12.95	1.21	30.73	1.31	33.27	2.87	72.90	3.17	80.52	2325	3460	5585	8312
15493.486000	250	37/.0822	0.53	13.46	0.55	13.97	1.26	32.00	1.36	34.54	2.98	75.69	3.28	83.31	2699	4017	6143	9142
15493.486200	350	37/.0973	0.62	15.75	0.65	16.51	1.35	34.29	1.45	36.83	3.19	81.03	3.49	88.65	3658	5444	7455	11095
15493.486500	500	37/.1162	0.74	18.80	0.77	19.56	1.48	37.59	1.58	40.13	3.46	87.88	3.77	95.76	5090	7575	9397	13985
15493.487000	750	61/.1109	0.91	23.11	0.95	24.13	1.66	42.16	1.78	45.21	3.89	98.81	4.20	106.68	7487	11142	12659	18839
15493.487500	1000	61/.1280	1.06	26.92	1.10	27.94	1.81	45.97	1.94	49.28	4.23	107.44	4.54	115.32	9861	14675	15644	23281

\*\* 133% Insulation level is available upon request

Dimensions and weights are nominal, subject to industry tolerance.

Note:  
a) Sizes smaller than 2 AWG do not include "FOR CT USE"  
b) The NESC Lightning bolt symbol is on all Uniblend constructions



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# DuraSheath® Medium-Voltage Power, Non-Shielded, EPR/HYP

5kV, UL Type MV-90

## Product Construction

### Conductor:

- 8 AWG thru 1000 kcmil annealed bare copper Anapact™ compact Class B strand

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black jacket material

### Jacket:

- Low-Lead Hypalon® Chlorosulfonated Polyethylene (CSPE)

### Print:

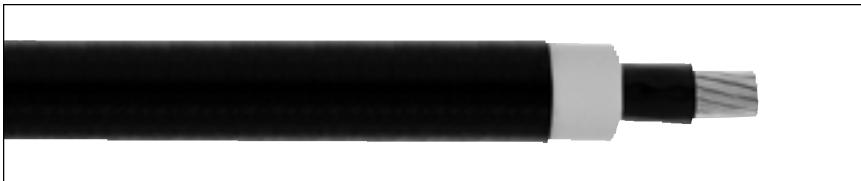
- GENERAL CABLE® BICC® BRAND (MI) SIZE OR (AWG or KCMIL) COMPACT CU DURASHEATH LL 5KV NONSHIELDED EP TYPE MV-90 WET OR DRY FOR CT USE OIL RES II (UL) MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Options:

- Multi-conductor constructions
- Other constructions available upon request

### Applications:

- Proven record of reliable performance through extensive use in these applications: pulp and paper mills, petrochemical plants, sewage treatment facilities, water treatment plants, steel mills, textile mills, utility power generating stations, scrubbers and other environmental protection systems, railroad and mining facilities



### Applications (con't):

- For use in industrial and utility applications, where ease of installation is a major concern because of limited space and exposure to personnel is minimal
- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, conduit, open tray, and underground duct installations

### Features:

- Rated at 90°C
- Excellent heat and moisture resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Sunlight-resistant
- Simplification of splicing and terminating by elimination of need to handle cable shield
- Extra tough, mechanically rugged composite insulation and jacket construction
- Meets cold bend test at -35°C

### Compliances:

- 1999 NEC:
  - Ampacities ..... Article 310-15
  - Bending Radius ..... Article 300-34

### Compliances (con't):

- Wiring Methods ..... Article 300 & 710
- Grounding Conductors ..... Article 250-95
- Cable Trays ..... Article 318-13
- Type MV ..... Article 326
- IEC 6006-659/NEMA WC71  
(Formerly IEC 6006-516/NEMA WC8)
- UL 1072
- FAA L824 specification for cable for Underground Airport Lighting Circuits
- UL listed as Type MV-90 for use in accordance with NEC
- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)
- Listed "oil-resistant II"
- Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA acceptable

### Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

CATALOG NUMBER	COND. (AWG/kcmil SIZE)	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION THICKNESS		NOMINAL INSULATION DIAMETER		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs./1000ft	kg/km	lbs./1000ft	kg/km
14901.410800	8	7/.0486	0.14	3.56	0.15	3.81	0.125	3.18	0.41	10.41	0.58	14.73	51	76	196	292
14901.410600	6	7/.0612	0.17	4.32	0.19	4.83	0.125	3.18	0.44	11.18	0.62	15.75	81	121	241	359
14901.410400	4	7/.0772	0.22	5.59	0.23	5.84	0.125	3.18	0.49	12.45	0.66	16.76	129	192	308	458
14901.410200	2	7/.0974	0.27	6.86	0.29	7.37	0.125	3.18	0.55	13.97	0.72	18.29	205	305	408	607
14901.410100	1	7/.0664	0.31	7.87	0.33	8.38	0.125	3.18	0.58	14.73	0.76	19.30	259	385	476	708
14901.415100	1/0	19/.0745	0.34	8.64	0.36	9.14	0.125	3.18	0.62	15.75	0.79	20.07	326	485	562	836
14901.415200	2/0	19/.0837	0.38	9.65	0.41	10.41	0.125	3.18	0.66	16.76	0.84	21.34	411	612	666	991
14901.415300	3/0	19/.0940	0.43	10.92	0.45	11.43	0.125	3.18	0.71	18.03	0.92	23.37	518	771	823	1225
14901.415400	4/0	19/.1055	0.48	12.19	0.50	12.70	0.125	3.18	0.76	19.30	0.97	24.64	653	972	983	1463
14901.416000	250	37/.0822	0.53	13.46	0.55	13.97	0.140	3.56	0.84	21.34	1.08	27.43	772	1149	1183	1761
14901.416200	350	37/.0973	0.62	15.75	0.64	16.26	0.140	3.56	0.93	23.62	1.17	29.72	1080	1607	1545	2299
14901.416500	500	37/.1162	0.74	18.80	0.77	19.56	0.140	3.56	1.06	26.92	1.30	33.02	1544	2298	2077	3091
14901.417000	750	61/.1109	0.91	23.11	0.94	23.88	0.155	3.94	1.26	32.00	1.54	39.12	2316	3447	3040	4524
14901.417500	1000	61/.1280	1.06	26.92	1.09	27.69	0.155	3.94	1.42	36.07	1.70	43.18	3086	4593	3913	5823

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"

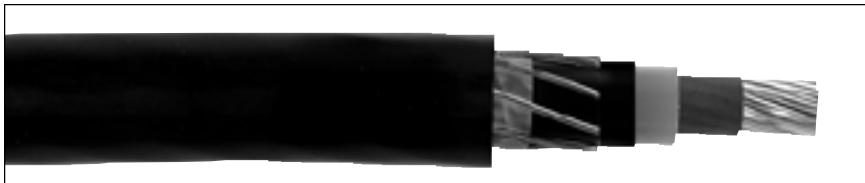


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# Copper Wire Shield Medium-Voltage Power, XLPE/PVC

5kV & 15kV, UL Type MV-90



## Product Construction

### Conductor:

- 8 AWG thru 1000 kcmil Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8

### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

### Insulation:

- Cross-Linked Polyethylene (XLPE)

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Metallic Shield:

- A concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape

### Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

### Print:

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCMIL) CU (INSULATION THICKNESS) MILS XLPE (VOLTAGE) KV% INSULATION LEVEL TYPE MV-90 (UL) SUN RES MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Options:

- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)

### Applications:

- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations, where the environment is relatively dry and cost effectiveness is a factor

### Features:

- Rated at 90°C
- Triple tandem extrusion of the strand shield, insulation and insulation shield provides a virtually perfect cable core

## Features (con't):

- Excellent resistance to electro-chemical treeing, corona, heat, moisture and a wide variety of industrial chemicals
- PVC jacket provides mechanical protection of the shielding system during installation as well as protection from many industrial chemicals
- Sunlight-resistant
- Meets cold bend test at -35°C

## Compliances:

- 1999 NEC:
  - Ampacities ..... Article 310-15
  - Wiring Methods ..... Article 300 & 710
  - Cable Trays ..... Article 318
  - Grounding Sizes ..... Article 250-95
  - Medium-Voltage Cable Type MV ..... Article 326
  - ICEA S-93-639/NEMA WC74 (Formerly ICEA S-66-524/NEMA WC7)
  - ICEA S-97-682
  - AEIC CS8 (Formerly AEIC CS5)
  - UL 1072
  - UL listed as Type MV-90 (100% or 133% insulation level) for use in accordance with NEC
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable

## Packaging:

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

## 5kV - 100% INSULATION LEVEL - 90 MILS

CATALOG NUMBER	COND. (AWG/kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL DIAMETER WIRE SHIELD		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/1000ft	kg/km	lbs/1000ft	kg/km
17241.010800	8	7/.0486	0.14	3.56	0.18	4.57	0.37	9.40	0.43	10.92	0.47	11.94	0.59	14.99	62	92	185	275
17241.010600	6	7/.0612	0.18	4.57	0.22	5.59	0.40	10.16	0.47	11.94	0.51	12.95	0.66	16.76	92	137	250	372
17241.010400	4	7/.0772	0.23	5.84	0.27	6.86	0.45	11.43	0.52	13.21	0.56	14.22	0.70	17.78	140	208	305	454
17241.010200	2	7/.0974	0.28	7.11	0.33	8.38	0.51	12.95	0.58	14.73	0.62	15.75	0.77	19.56	216	321	420	625
17241.015100	1/0	19/.0745	0.36	9.14	0.40	10.16	0.59	14.99	0.66	16.76	0.70	17.78	0.85	21.59	337	502	580	863
17241.015200	2/0	19/.0837	0.41	10.41	0.45	11.43	0.63	16.00	0.70	17.78	0.74	18.80	0.90	22.86	426	634	670	997
17241.015400	4/0	19/.1055	0.51	12.95	0.55	13.97	0.74	18.80	0.81	20.57	0.85	21.59	1.05	26.67	668	994	1000	1488
17241.016000	250	37/.0822	0.56	14.22	0.61	15.49	0.80	20.32	0.87	22.10	0.91	23.11	1.11	28.19	787	1171	1155	1719
17241.016200	350	37/.0973	0.66	16.76	0.72	18.29	0.91	23.11	0.98	24.89	1.02	25.91	1.21	30.73	1096	1631	1505	2240
17241.016500	500	37/.1162	0.79	20.07	0.85	21.59	1.04	26.42	1.13	28.70	1.17	29.72	1.37	34.80	1561	2323	2060	3066
17241.017000	750	61/.1109	0.97	24.64	1.04	26.42	1.24	31.50	1.33	33.78	1.37	34.80	1.52	38.61	2338	3479	3010	4479
17241.017500	1000	61/.1280	1.12	28.45	1.19	30.23	1.39	35.31	1.49	37.85	1.53	38.86	1.67	42.42	3110	4628	3860	5744

Dimensions and weights are nominal, subject to industry tolerance.

Note:
 

- a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"
- b) The NESC Lightning bolt symbol is on all Copper Wire Shield constructions



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# Copper Wire Shield Medium-Voltage Power, XLPE/PVC

5kV & 15kV, UL Type MV-90

**Product Construction****Conductor:**

- 2 AWG thru 1000 kcmil Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8

**Extruded Strand Shield (ESS):**

- Extruded thermoset semi-conducting stress control layer over conductor

**Insulation:**

- Cross-Linked Polyethylene (XLPE)

**Extruded Insulation Shield (EIS):**

- Thermoset semi-conducting polymeric layer free stripping from insulation

**Metallic Shield:**

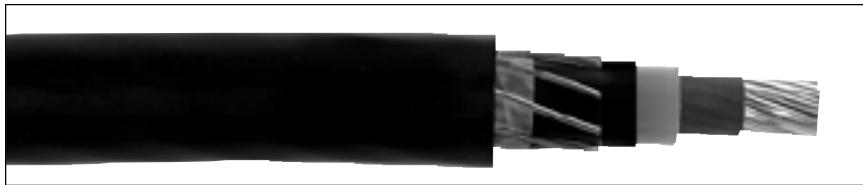
- A concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape

**Jacket:**

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

**Print:**

- GENERAL CABLE® BICC® BRAND (MI) SIZE (AWG OR KCML) CU (INSULATION THICKNESS) MILS XLPE (VOLTAGE) KV% INSULATION LEVEL TYPE MV-90 (UL) SUN RES MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

**Options:**

- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC and also meet IEEE 383 (70,000 BTU/hr)

**Applications:**

- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, direct burial, conduit, open tray, and underground duct installations, where the environment is relatively dry and cost effectiveness is a factor

**Features:**

- Rated at 90°C
- Triple tandem extrusion of the strand shield, insulation and insulation shield provides a virtually perfect cable core
- Excellent resistance to electro-chemical treeing, corona, heat, moisture and a wide variety of industrial chemicals
- PVC jacket provides mechanical protection of the shielding system during installation as well as protection from many industrial chemicals
- Sunlight-resistant
- Meets cold bend test at -35°C

**Compliances:**

- 1999 NEC:
- Ampacities ..... Article 310-15
  - Wiring Methods ..... Article 300 & 710
  - Cable Trays ..... Article 318
  - Grounding Sizes ..... Article 250-95
  - Medium-Voltage Cable Type MV ..... Article 326
  - ICEA S-93-639/NEMA WC74 (Formerly ICEA S-66-524/NEMA WC7)
  - ICEA S-97-682
  - AEIC CS8 (Formerly AEIC CS5)
  - UL 1072
  - UL listed as Type MV-90 (100% or 133% insulation level) for use in accordance with NEC
  - Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
  - OSHA acceptable

**Packaging:**

- Material cut to length and shipped out on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit. Extra charges apply for cuts less than 1000 ft., lags, pulling eyes, paralleling, and plexing

**15kV - 133% INSULATION LEVEL - 220 MILS**

CATALOG NUMBER	COND. (AWG / kcmil) SIZE	COND. STRAND	NOMINAL CONDUCTOR DIAMETER		EXTRUDED STRAND SHIELD NOMINAL DIAMETER		NOMINAL INSULATION DIAMETER		EXTRUDED INSULATION SHIELD NOMINAL DIAMETER		NOMINAL DIAMETER WIRE SHIELD		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	lbs/ 1000ft	kg/ km	lbs/ 1000ft	kg/ km
17245.010200	2	7/.0974	0.28	7.11	0.33	8.38	0.78	19.81	0.85	21.59	0.89	22.61	1.08	27.43	220	327	670	997
17245.010100	1	19/.0664	0.32	8.13	0.36	9.14	0.81	20.57	0.88	22.35	0.92	23.37	1.11	28.19	273	406	720	1072
17245.015100	1/0	19/.0745	0.36	9.14	0.40	10.16	0.85	21.59	0.92	23.37	0.96	24.38	1.16	29.46	341	507	835	1243
17245.015200	2/0	19/.0837	0.41	10.41	0.45	11.43	0.90	22.86	0.97	24.64	1.01	25.65	1.20	30.48	426	634	930	1384
17245.015400	4/0	19/.1055	0.51	12.95	0.55	13.97	1.01	25.65	1.08	27.43	1.12	28.45	1.31	33.27	671	999	1250	1860
17245.016000	250	37/.0822	0.56	14.22	0.61	15.49	1.07	27.18	1.16	29.46	1.20	30.48	1.39	35.31	789	1174	1430	2128
17245.016200	350	37/.0973	0.66	16.76	0.72	18.29	1.17	29.72	1.27	32.26	1.31	33.27	1.50	38.10	1103	1641	1815	2701
17245.016500	500	37/.1162	0.79	20.07	0.85	21.59	1.30	33.02	1.40	35.56	1.44	36.58	1.64	41.66	1566	2330	2380	3542
17245.017000	750	61/.1109	0.97	24.64	1.04	26.42	1.50	38.10	1.60	40.64	1.64	41.66	1.85	46.99	2342	3485	3490	5194
17245.017500	1000	61/.1280	1.12	28.45	1.19	30.23	1.65	41.91	1.78	48.21	1.82	46.23	2.02	51.31	3117	4639	4420	6578

Dimensions and weights are nominal, subject to industry tolerance.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE"

b) The NEC Lightning bolt symbol is on all Copper Wire Shield constructions